

Fuels and Fire Behavior Advisory

North of the Alaska Range focused along Tanana Valley

May 15, 2015



Subject: Early unseasonably warm and very dry weather have combined with dry pre-green fuels across a portion of southern Interior Alaska. High pressure will keep out moisture and keep relative humidities dangerously low.

Discussion: High pressure over Canada is keeping the eastern half of Alaska extremely dry. This pattern is expected to dominate for the next 7 to 10 days, keeping an extremely dry air mass across the eastern Interior. RH values have already plummeted to single digits just north of the Alaska Range, and this trend is expected to persist as long as the pattern holds.

Pre-green spring conditions can provide abundant fuel that is easily dried and available for ignition. With Fine Fuel Moisture Code (FFMC) values now in the extreme range across broad portions of the lower elevations in the southern Interior, ignition potential for human caused starts and any lightning that may occur highlights a very real risk. While these extremely dry conditions normally come under high pressure with light winds, forecasts are calling for gradients that will produce periods of gusty winds in several of these critical areas. With that combination, very rapid spread rates and intense burning of surface fuels create potential for torching and crown fire. No relief is anticipated within the next week.

Difference from normal conditions: Above normal temperatures and extremely low relative humidities are producing very hazardous potential for the start and spread of wildfires across southern Interior Alaska. Fuels have been snow free for two to three weeks, and green-up is still in its early stages. These conditions are expected to continue for the next week, and periods of gusty winds will contribute to what can be fast moving and intensely burning wildfires.

Concerns to Firefighters and the Public: With few fires as a reference so far this spring, these conditions have the potential to surprise firefighters:

- Increase in expected outdoor activity as weather turns warm and school seasons draw to a close.
- Abundant fine fuels that are subject to rapid drying under these extremely dry conditions.
- Windy conditions that can produce very high rates of spread, reducing time for escape to safe areas.
- Intense burning at the fire-front that can render escape into the black, or burned areas, unavailable.
- Uncertainty about the potential for crown fire and extreme fire behavior under these early season conditions.

Mitigation Measures:

- Keep updated weather forecasts in hand and in mind when attacking fires.
- Ensure that briefings highlight the unusually warm and dry weather that is creating very low fine fuel moisture.
- Alert initial attack personnel to the need for effective anchor points, and accessible safety zones.
- Escape into the black should be a primary consideration with rapidly spreading surface fires.
- Warn the public to anticipate surprisingly easy ignition of fuels around their houses and the difficulty of stopping them once they start.

Area of Concern: Tanana Valley and surrounding areas north of the Alaska Range

